	Application No.	oplication No. Applicant(s)	
Notice of Allowability	09/787,139	/787,139 EN ET AL.	
	Examiner	Art Unit	
	Jeremy C. Norris	2841	
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commu IGHTS. This application is s and MPEP 1308.	this application. If not include inication will be mailed in due	ed course. <b>THIS</b>
2. The allowed claim(s) is/are <u>9-13,23,25,26,48-53,56 and 63</u>	<u>3</u> .		
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority una)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> <li>3.  Copies of the certified copies of the priority do</li> </ul>	e been received. e been received in Applicatio	n No	tion from the
International Bureau (PCT Rule 17.2(a)).		and the state of t	
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4.   A SUBSTITUTE OATH OR DECLARATION must be subm	MENT of this application.  itted. Note the attached EXA	MINER'S AMENDMENT or N	
INFORMAL PATENT APPLICATION (PTO-152) which give	es reason(s) wny the oath or	declaration is deficient.	
5. CORRECTED DRAWINGS ( as "replacement sheets") must			
(a) ☐ including changes required by the Notice of Draftspers		v (PTO-948) attached	
1) hereto or 2) to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner' Paper No./Mail Date	•		
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			back) of
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			Note the
Attachment(s)			
1. Notice of References Cited (PTO-892)		formal Patent Application	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ∐ Interview St Paper No./	ummary (PTO-413), Mail Date Amendment/Comment	
<ol> <li>Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>06/06</u></li> </ol>	7.   Examiner's	Amendment/Comment	
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛭 Examiner's	Statement of Reasons for Allo	wance
	9. 🗌 Other		
· .			
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## **DETAILED ACTION**

## Allowable Subject Matter

Claims 9-13, 23, 25, 26, 48-53, 56, and 63 are allowed.

The following is an examiner's statement of reasons for allowance: Claims 9, 11, and 12 state the limitation "wherein said copper film comprises an electroplated layer and has properties that (a) its crystallinity is such that the X-ray diffraction half-width of the (331) plane of copper is less than 0.3 deg". This limitation, in conjunction with the other claimed features, was neither found to be disclosed in, nor suggested by the prior art. Claim 23 states the limitation "said electroless plated film in convex areas of said roughened surface being relatively greater in thickness than said electroless plated film in concave areas of said roughened surface". This limitation, in conjunction with the other claimed features, was neither found to be disclosed in, nor suggested by the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy C. Norris whose telephone number is 571-272-1932. The examiner can normally be reached on Monday - Friday, 9:30 am - 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**JCSN** 

Tuan Dink 12-90-06.